Experimental Cell Research

EDITOR-IN-CHIEF

N. Ringertz

ASSOCIATE EDITOR
FOR NORTH AMERICA

R. Baserga

Volume 222, 1996

Academic Press
San Diego New York Boston
London Sydney Tokyo Toronto

Copyright © 1996 by Academic Press, Inc.
All Rights Reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owner.

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (222 Rosewood Drive, Danvers, Massachusetts 01923), for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1996 articles are as shown on the article title page; if no fee code appears on the title page, the copy fee is the same as for current articles.

0014-4827/96 $12.00

MADE IN THE UNITED STATES OF AMERICA

This journal is printed on acid-free paper.

Contents of Volume 222

Number 1, January 10, 1996

FRANÇOIS BOUDREAU, SYLVIE BLAIS, AND CLAUDE ASSELIN. Regulation of CCAAT/Enhancer Binding Protein Isoforms by Serum and Glucocorticoids in the Rat Intestinal Epithelial Crypt Cell Line IEC-6 1

MARK F. BARREUTHER AND LAURA B. GRABEL. The Role of Phosphorylation in Modulating β_1 Integrin Localization 10

BOHDAN J. SOLTYS AND RADHEY S. GUPTA. Immunoelectron Microscopic Localization of the 60-kDa Heat Shock Chaperonin Protein (Hsp60) in Mammalian Cells 16

XUN LI, MYRON R. MELAMED, AND ZBIGNIEW DARZYNKIEWICZ. Detection of Apoptosis and DNA Replication by Differential Labeling of DNA Strand Breaks with Fluorochromes of Different Color 28

IZUMI ASAHINA, T. KUBER SAMPATH, AND PETER V. HAUSCHKA. Human Osteogenic Protein-1 Induces Chondroblastic, Osteoblastic, and/or Adipocytic Differentiation of Clonal Murine Target Cells 38

GARY S. GOLDBERG, ALONSO P. MORENO, JOHN F. BECHBERGER, STEPHEN S. HEARN, RICHARD R. SHIVERS, DANIEL J. MACPHEE, YU-CHUN ZHANG, AND CHRISTIAN C. G. NAUS. Evidence That Disruption of Connexon Particle Arrangements in Gap Junction Plaques Is Associated with Inhibition of Gap Junctional Communication by a Glycyrrhetinic Acid Derivative 48

PAUL S. WRIGHT, DOREEN CROSS-DOERSEN, JOHN P. H. TH'NG, XIAO-WEN GUO, HARRY A. CRISSMAN, E. MORTON BRADBURY, LAUREN R. MONTGOMERY, FELISA Y. THOMPSON, DAVID E. LOUDY, J. O'NEAL JOHNSTON, AND ALAN J. BITONTI. A Ribonucleotide Reductase Inhibitor, MDL 101,731, Induces Apoptosis and Elevates TRPM-2 mRNA Levels in Human Prostate Tumor Xenografts 54

MICKIE BHATIA, JAMES B. KIRKLAND, AND KELLY A. MECKLING-GILL. 1,25-Dihydroxyvitamin D_3 Primes Acute Promyelocytic Cells for TPA-Induced Monocytic Differentiation through Both PKC and Tyrosine Phosphorylation Cascades 61

MARTINE VERDIÈRE-SAHUQUÉ, MOHAMMED AKAABOUNE, SYLVIE LACHKAR, BARRY W. FESTOFF, MARTINE JANDROT-PERRUS, LUIS GARCÍA, GEORGIA BARLOVATZ-MEIMON, AND DANIEL HANTAÏ. Myoblast Fusion Promotes the Appearance of Active Protease Nexin I on Human Muscle Cell Surfaces 70

DIANA BELLOVINO, TAKASHI MORIMOTO, FRANCESCA TOSETTI, AND SANCIA GAETANI. Retinol Binding Protein and Transthyretin Are Secreted as a Complex Formed in the Endoplasmic Reticulum in HepG2 Human Hepatocarcinoma Cells 77

ANDREA COSSARIZZA, DANIELA CECCARELLI, AND ALBERTO MASINI. Functional Heterogeneity of an Isolated Mitochondrial Population Revealed by Cytofluorometric Analysis at the Single Organelle Level 84

HOLDEN T. MAECKER, SASCHA HEDJBELI, MORTIMER ALZONA, AND PHONG T. LE. Comparison of Apoptosis Signaling through T Cell Receptor, Fas, and Calcium Ionophore 95

ISAAC YI KIM, DAVID J. ZELNER, JULIA A. SENSIBAR, HAN-JONG AHN, LINDA PARK, JIN-HO KIM, AND CHUNG LEE. Modulation of Sensitivity to Transforming Growth Factor-β1 (TGF-β1) and the Level of Type II TGF-β Receptor in LNCaP Cells by Dihydrotestosterone 103

Reinhard Fässler, Takako Sasaki, Rupert Timpl, Mon-Li Chu, and Sabine Werner. Differential Regulation of Fibulin, Tenascin-C, and Nidogen Expression during Wound Healing of Normal and Glucocorticoid-Treated Mice 111

Christiane Langer, Juliane M. Jürgensmeier, and Georg Bauer. Reactive Oxygen Species Act at both TGF-β-Dependent and -Independent Steps during Induction of Apoptosis of Transformed Cells by Normal Cells 117

Hitomi Yamamoto, Michael Crow, Linda Cheng, Edward Lakatta, and James Kinsella. PDGF Receptor-to-Nucleus Signaling of p91 (STAT1α) Transcription Factor in Rat Smooth Muscle Cells 125

Samia Benatmane and Christiane Plas. Delayed Glucocorticoid-Dependent Development of the Insulin Response after Heat Shock in Cultured Fetal Hepatocytes: Correlation with a Transient Defect in Glucocorticoid Receptor Binding Property 131

José M. Frade, Juan R. Martínez-Morales, and Alfredo Rodríguez-Tébar. Laminin-1 Selectively Stimulates Neuron Generation from Cultured Retinal Neuroepithelial Cells 140

Guangyuan Zeng and Albert J. T. Millis. Differential Regulation of Collagenase and Stromelysin mRNA in Late Passage Cultures of Human Fibroblasts 150

Juan C. Aon, Viviana A. Rapisarda, and Sonia Cortassa. Metabolic Fluxes Regulate the Success of Sporulation in *Saccharomyces cerevisiae* 157

Shaoqiu Zhuo, Saijun Fan, and Seymour Kaufman. Effects of Depletion of Intracellular Tetrahydrobiopterin in Murine Erythroleukemia Cells 163

A. Minguez and S. Moreno Diaz de la Espina. *In Situ* Localization of Nucleolin in the Plant Nucleolar Matrix 171

Steven J. Shiff, Markos I. Koutsos, Liang Qiao, and Basil Rigas. Nonsteroidal Antiinflammatory Drugs Inhibit the Proliferation of Colon Adenocarcinoma Cells: Effects on Cell Cycle and Apoptosis 179

Yumiko Oka and Yohei Hirai. Inductive Influences of Epimorphin on Endothelial Cells *in Vitro* 189

Stefan Selbert, Petra Fischer, Andre Menke, Harald Jockusch, Dieter Pongratz, and Angelika A. Noegel. Annexin VII Relocalization as a Result of Dystrophin Deficiency 199

Brigitte Bauvois, Johan Van Weyenbergh, Dany Rouillard, and Juana Wietzerbin. TGF-β1-Stimulated Adhesion of Human Mononuclear Phagocytes to Fibronectin and Laminin Is Abolished by IFN-γ: Dependence on $\alpha 5\beta 1$ and $\beta 2$ Integrins 209

Hirobumi Teraoka, Megumi Mikoshiba, Kozo Takase, Kohtaro Yamamoto, and Kinji Tsukada. Reversible G1 Arrest Induced by Dimethyl Sulfoxide in Human Lymphoid Cell Lines: Dimethyl Sulfoxide Inhibits IL-6-Induced Differentiation of SKW6-CL4 into IgM-Secreting Plasma Cells 218

Joachim Dürr, Pirkko Lammi, Simon L. Goodman, Thomas Aigner, and Klaus von der Mark. Identification and Immunolocalization of Laminin in Cartilage 225

Raymond C. Hapak, C. Michael Stanley, and Michael T. Henzl. Intrathymic Distribution of the Two Avian Thymic Parvalbumins 234

Short Note

Masayoshi Fukasawa, Hideki Adachi, Kotaro Hirota, Masafumi Tsujimoto, Hiroyuki Arai, and Keizo Inoue. SRB1, a Class B Scavenger Receptor, Recognizes both Negatively Charged Liposomes and Apoptotic Cells 246

Erratum

Volume 220, Number 1 (1995): Andrea Cossarizza, Claudio Franceschi, Daniela Monti, Stefano Salvioli, Enrica Bellesia, Roberto Rivabene, Luana Biondo, Gabriella Rainaldi, Antonella Tinari, and Walter Malorni, "Protective Effect of *N*-Acetylcysteine in Tumor Necrosis Factor-α-Induced Apoptosis in U937 Cells: The Role of Mitochondria," pp. 232–240 251

Number 2, February 1, 1996

Shinsuke Katoh, Noriko Nakagawa, Yoshiko Yano, Kumiko Satoh, Hiroyuki Kohno, Yasuhito Ohkubo, Takahiko Suzuki, and Kenichi Kitani. Hepatocyte Growth Factor Induces Transglutaminase Activity That Negatively Regulates the Growth Signal in Primary Cultured Hepatocytes 255

Martin Poot, Oliver Groß, Bernd Epe, Michael Pflaum, and Holger Hoehn. Cell Cycle Defect in Connection with Oxygen and Iron Sensitivity in Fanconi Anemia Lymphoblastoid Cells 262

Hitoshi Satoh, Yun Zhong, Hiroshi Isomura, Masato Saitoh, Katsuhiko Enomoto, Norimasa Sawada, and Michio Mori. Localization of 7H6 Tight Junction-Associated Antigen along the Cell Border of Vascular Endothelial Cells Correlates with Paracellular Barrier Function against Ions, Large Molecules, and Cancer Cells 269

Thomas A. Hughes and Peter R. Cook. Mimosine Arrests the Cell Cycle after Cells Enter S-Phase 275

Sugit Pattaramalai, Keith M. Skubitz, and Amy P. N. Skubitz. A Novel Recognition Site on Laminin for the $\alpha 3\beta 1$ Integrin 281

Yasushi Ohkubo, Yasuaki Shirayoshi, and Norio Nakatsuji. Autonomous Regulation of Proliferation and Growth Arrest in Mouse Primordial Germ Cells Studied by Mixed and Clonal Cultures 291

Duško Ilić, Satoshi Kanazawa, Yasuhide Furuta, Tadashi Yamamoto, and Shinichi Aizawa. Impairment of Mobility in Endodermal Cells by FAK Deficiency 298

Christian O. A. Reiser, Martin Marx, Jürgen Hoppe, and Margarete Goppelt-Struebe. Modulation of Prostaglandin G/H Synthase Expression in Mesangial Cells Transfected by $pp60^{c\text{-}src}$ Proto-oncogene 304

Dan Hauzenberger, Nancy Martin, Staffan Johansson, and Karl-Gösta Sundqvist. Characterization of Lymphocyte Fibronectin 312

Catherine Jumarie, F. Elizabeth Herring-Gillam, Jean-François Beaulieu, and Christiane Malo. Triiodothyronine Stimulates the Expression of Sucrase–Isomaltase in Caco-2 Cells Cultured in Serum-Free Medium 319

Hiroshi Mohri, Kazunobu Katoh, Akihiko Iwamatsu, and Takao Okubo. The Novel Recognition Site in the C-Terminal Heparin-Binding Domain of Fibronectin by Integrin $\alpha 4\beta 1$ Receptor on HL-60 Cells 326

Roser Pagan, Isabel Martín, Ana Alonso, Miquel Llobera, and Senén Vilaró. Vimentin Filaments Follow the Preexisting Cytokeratin Network during Epithelial–Mesenchymal Transition of Cultured Neonatal Rat Hepatocytes 333

Sal Caradonna, Robert Ladner, Michael Hansbury, Mary Kosciuk, Frank Lynch, and Susan Muller. Affinity Purification and Comparative Analysis of Two Distinct Human Uracil-DNA Glycosylases 345

RON SAULNIER, BHAVNA BHARDWAJ, JENNIFER KLASSEN, DORIS LEOPOLD, NADER RAHIMI, ERIC TREMBLAY, DEANE MOSHER, AND BRUCE ELLIOTT. Fibronectin Fibrils and Growth Factors Stimulate Anchorage-Independent Growth of a Murine Mammary Carcinoma 360

FRÉDÉRIC GILLES, MARIE-BERTHE RAES, DOMINIQUE STÉHELIN, BERNARD VANDENBUNDER, AND VÉRONIQUE FAFEUR. The *c-ets-1* Proto-oncogene Is a New Early-Response Gene Differentially Regulated by Cytokines and Growth Factors in Human Fibroblasts 370

FRANCIS BERENBAUM, CLAIRE JACQUES, GINETTE THOMAS, MARIE THÉRÈSE CORVOL, GILBERT BÉRÉZIAT, AND JOËLLE MASLIAH. Synergistic Effect of Interleukin-1β and Tumor Necrosis Factor α on PGE_2 Production by Articular Chondrocytes Does Not Involve PLA_2 Stimulation 379

SHIGERU KAWAHIRE, TARO TACHIBANA, MASANORI UMEMOTO, YOSHIHIRO YONEDA, NORIO IMAI, MASASHI SAITO, TOHRU ICHIMURA, SABURO OMATA, AND TSUNEYOSHI HORIGOME. Subcellular Distribution and Phosphorylation of the Nuclear Localization Signal Binding Protein, NBP60 385

Short Note

GIUSEPPE RASCHELLÀ, ANNA NEGRONI, SABINA PUCCI, ROBERTO AMENDOLA, SONIA VALERI, AND BRUNO CALABRETTA. B-myb Transcriptional Regulation and mRNA Stability during Differentiation of Neuroblastoma Cells 395

Erratum

Volume 220, Number 2 (1995): Cover photo legend 400

Author Index for Volume 222 401

NOTICE

The Subject Index for Volume 222 will appear in the December 15, 1996, issue as part of a cumulative index for the year 1996.